

# Exhibit 14

1 UNITED STATES DISTRICT COURT  
2 FOR THE NORTHERN DISTRICT OF OHIO  
3 EASTERN DIVISION

4 \*\*\*\*\*

5 IN RE: NATIONAL

6 PRESCRIPTION OPIATE MDL No. 2804  
7 LITIGATION

8 Case No.

9 This document relates to: 17-MD-2804

10 The County of Summit,

11 Ohio, et al v. Purdue Hon. Dan A. Polster  
12 Pharma L.P., et al

13 Case No. 1:18-OP-45090

14 The County of Cuyahoga v.

15 Purdue Pharma L.P., et al

16 Case No. 17-OP-45004

17 \*\*\*\*\*

18 HIGHLY CONFIDENTIAL - SUBJECT TO  
19 FURTHER CONFIDENTIALITY REVIEW  
20 VIDEOTAPED DEPOSITION OF DAVID CUTLER, Ph.D.

21 Friday, April 26th, 2019

22 9:00 a.m.

23 Held At:

24 Robins Kaplan LLP

800 Boylston Street

Boston, Massachusetts

REPORTED BY:

Maureen O'Connor Pollard, RMR, CLR, CSR

<p style="text-align: right;">Page 54</p> <p>1 Q. Any other companies that you can think 2 of that you've attributed harms to in this case? 3 MR. SOBOL: Objection. 4 BY MR. KNAPP: 5 Q. In your report. Strike that. 6 Any other companies you can think of 7 that you've attributed harms to in your report? 8 MR. SOBOL: Objection. 9 A. I do not attribute harms in the report 10 to any single company. 11 BY MR. KNAPP: 12 Q. Well, by implication, if defendants 13 are specific companies, are you attributing harm 14 to particular companies, or no? 15 MR. SOBOL: Objection. 16 A. There are two types of defendants 17 here. Let me answer your question that way. 18 There are two types of defendants. There are 19 the manufacturers, and there are the 20 distributors, at least from an economic 21 perspective, that's how I think about them. So 22 I was giving you, obviously, some of the 23 manufacturers. 24 In terms of the distributors, there</p>	<p style="text-align: right;">Page 56</p> <p>1 attempt to apportion harm to any individual 2 defendant. 3 Q. And your model does not calculate the 4 percentage of tortious conduct that proximally 5 caused any harm that is attributable to the 6 plaintiff, doesn't it? 7 A. The model does not attempt to 8 apportion any harm to any specific party. 9 Q. Including the plaintiff? 10 MR. SOBOL: Objection. 11 A. That's correct, including the 12 plaintiff. 13 BY MR. KNAPP: 14 Q. And including each defendant, right? 15 MR. SOBOL: Objection. 16 You can answer. 17 A. That is correct. The model does not 18 determine the portion of harm for any individual 19 defendant. 20 BY MR. KNAPP: 21 Q. And the model does not calculate the 22 percentage of harm that was proximately caused 23 by any non-defendants either, right? 24 MR. SOBOL: Objection.</p>
<p style="text-align: right;">Page 55</p> <p>1 are a number of distributors as well. There are 2 also -- distributors are both those involved in 3 shipments as well as those involved in sales, 4 for example, Walgreens and CVS, but there are 5 also the shipment companies, for example, 6 Cardinal Health and McKesson and other 7 companies. 8 But again, I don't want to implicate 9 any without being absolutely correct, so I 10 will -- I will not say any more company names. 11 BY MR. KNAPP: 12 Q. Let's turn to Paragraph 31 of your 13 report. Are you at Paragraph 31? 14 A. Yes, I am. 15 Q. So you made no attempt to uniquely 16 apportion harms resulting from actions by any 17 individual type of defendant, right? 18 A. That's correct. I did not attempt to 19 apportion harms to any individual type of 20 defendant. 21 Q. And you also made no attempt to 22 uniquely apportion harm to any individual 23 defendant, correct? 24 A. That is correct, I did not make any</p>	<p style="text-align: right;">Page 57</p> <p>1 A. That is correct. There is no 2 apportionment of harm to any non-defendant. 3 BY MR. KNAPP: 4 Q. And you made no attempt to calculate 5 whether any particular defendant was more than 6 50 percent at fault, did you? 7 MR. SOBOL: Objection. 8 A. I did not make any attempt to 9 determine whether any individual defendant was 10 more than 50 percent at fault. 11 BY MR. KNAPP: 12 Q. You made no attempt to calculate the 13 percentage of fault of any individual defendant? 14 A. I made no attempt to calculate the 15 proportion of fault due to any individual 16 defendant. 17 Q. Now, the plaintiffs have recently 18 represented that they may proceed to trial with 19 only a subset of the defendants that are 20 currently in this case. If that happens, would 21 you need to redo your model? 22 MR. SOBOL: Objection. 23 A. The model that I estimate translates 24 the shipments of opioids into harms. It then</p>

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1 takes as an input the share of opioid shipments  
2 which are due to misconduct on the part of the  
3 defendants. If the court or for any other  
4 reason -- if the court wishes to know the impact  
5 of any particular single defendant or subset of  
6 defendants, the model could be used to do that  
7 because it would take as input those harms which  
8 are related to that specific defendant or set of  
9 defendants.

10 BY MR. KNAPP:

11 Q. And what you're referring to when you  
12 say the share of opioid shipments which are due  
13 to misconduct on the part of defendants, are you  
14 referring to Professor Rosenthal's conclusions?

15 A. In the body of the report, the share  
16 of shipments that result from misconduct on the  
17 part of the defendants comes from Professor  
18 Rosenthal's conclusions.

19 Q. And so you would have to redo your  
20 report to reduce the amount of shipments that  
21 you're calculating the percentages off of, is  
22 that right?

23 MR. SOBOL: Objection.

24 BY MR. KNAPP:

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1 Q. Strike that.  
2 If any defendant is not in the first  
3 trial, you would have to redo your model to  
4 remove the percentages of shipments associated  
5 with that defendant, correct?

6 MR. SOBOL: Objection.

7 A. I would like to make a distinction.  
8 The model is the model that translates shipments  
9 into harms. That model would not need to be  
10 reestimated. The inputs to the model, which  
11 is -- which is the percentage of shipments which  
12 are due to misconduct, that input would change,  
13 and so, therefore, the harms would change, but  
14 the model that's used would not change.

15 BY MR. KNAPP:

16 Q. Professor Cutler, you made no attempt  
17 to link any alleged harm to any particular  
18 prescription, is that right?

19 MR. SOBOL: Objection.

20 A. I did not relate the harm to any  
21 particular prescription.

22 BY MR. KNAPP:

23 Q. And you didn't relate the harm to any  
24 particular shipment either, did you?

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1 MR. SOBOL: Objection.

2 You can answer.

3 A. The harm is related to the aggregate  
4 of shipments to particular areas, so it's not on  
5 a shipment-by-shipment basis, but it is related  
6 to the shipments going to different areas.

7 BY MR. KNAPP:

8 Q. But you did not attempt to apportion  
9 harm and link it to a particular shipment, is  
10 that correct?

11 A. Can you just explain what you mean by  
12 "a particular shipment"?

13 Q. X company sent Y MMEs to Z company.

14 MR. SOBOL: Object to the form.

15 You can answer.

16 A. No, it did not relate any particular  
17 shipment to harms.

18 BY MR. KNAPP:

19 Q. And you made no attempt to link any  
20 particular type of opioid to the harms you  
21 analyzed in your report, right?

22 A. That's correct. We took all the  
23 opioids together here.

24 Q. So you treat for purposes of your

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1 report all opioid medicines as if they're the  
2 same, right?

3 MR. SOBOL: Objection.

4 A. They're not the same in terms --  
5 they're treated as similar given the MMEs, given  
6 the milligrams of morphine equivalent. That  
7 differs across medications. So, for example,  
8 one prescription of one medication, say 30  
9 pills, and 30 pills prescription of a different  
10 medication, they have different milligrams of  
11 morphine equivalents and, therefore, they would  
12 contribute differently to the shipments which  
13 are then related to the harms.

14 BY MR. KNAPP:

15 Q. Other than making the conversion for  
16 milligrams -- morphine milligram equivalence,  
17 you treated all opioid medicines as if they were  
18 the same, correct?

19 MR. SOBOL: Objection.

20 A. Other than for the MME conversion,  
21 they were added together -- there's another  
22 issue, which is two of the categories of opioid  
23 medications are used as both treatments for pain  
24 and as treatments for addiction, and so we had

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1 opinion regarding any harms that were  
2 specifically caused by Allergan Finance, right?

3 A. In this model we -- I do not have any  
4 particular -- I do not have any harms that are  
5 attributed to any particular defendant.

6 Q. And so going back to the point that we  
7 were just talking about, if a particular  
8 defendant manufactured or distributed a type of  
9 opioid that had less risk for abuse than other  
10 types of opioids, your model doesn't make any  
11 adjustments in terms of allocating percentages  
12 of harm to that defendant based upon the types  
13 of opioids that they sold?

14 MR. SOBOL: Objection.

15 A. In this model there is no allocation  
16 to any single defendant, and so, therefore --  
17 let me just say there is no -- there is no  
18 allocation to any single defendant.

19 BY MR. KNAPP:

20 Q. Well, isn't it possible, Professor  
21 Cutler, that you could rule out certain  
22 defendants as having contributed to some of the  
23 harms that you looked at?

24 MR. SOBOL: Objection.

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1 A. The model that I have here is not  
2 designed to do that. One would need to develop  
3 a different model to do that for each specific  
4 defendant. I haven't developed that model.

5 BY MR. KNAPP:

6 Q. Well, let's just say that a  
7 manufacturer didn't start manufacturing  
8 prescription opioids until 2010, okay? That's  
9 the hypothetical here. Your model would  
10 attribute harms from 2006 to 2009 to that  
11 defendant, correct?

12 MR. SOBOL: Objection.

13 BY MR. KNAPP:

14 Q. As part of the group of defendants,  
15 they are attributed harm according to your  
16 model, is that right?

17 MR. SOBOL: Objection.

18 A. What the model gives is the harm that  
19 results from all the defendants together. If  
20 the court wished to know about the impact of any  
21 individual defendant, the way to do that would  
22 be through the inputs that Professor Rosenthal  
23 provides where she provides the share of  
24 shipments in each year that are a result of

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1 misconduct. In the case of the model here, she  
2 provides the share of the shipments in each year  
3 that are a result of misconduct on the part of  
4 defendants as a whole. If one had data on the  
5 share of shipments that result from a specific  
6 defendant in a particular year, one could feed  
7 that into the model here and calculate -- the  
8 model that I developed and calculate the harms  
9 from that.

10 BY MR. KNAPP:

11 Q. But you haven't done that here, right?

12 A. I have not done anything with respect  
13 to any specific defendant.

14 Q. And so to the extent that a defendant  
15 wasn't marketing, manufacturing, or distributing  
16 from 2006 to 2009, you still attribute harm to  
17 that defendant, correct?

18 MR. SOBOL: Objection.

19 A. That's not correct.

20 BY MR. KNAPP:

21 Q. Why is that not correct?

22 A. It's not correct because it is  
23 attributing the harm to the defendants as a  
24 whole. It is not attributing it to any specific

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1 defendant. And there is nothing in this report  
2 that says in order to attribute it to a specific  
3 defendant, follow the following procedure.

4 Q. All right. In Paragraph 31 you also  
5 refer to indivisible harms. What are  
6 indivisible harms?

7 A. Can you just refer me to the very  
8 specific wording?

9 Q. It's in Paragraph 31, it's in the  
10 third line.

11 A. Thank you very much.

12 An indivisible harm is a harm where --  
13 at least as I was using the term, it's a harm  
14 where multiple parties may be responsible for  
15 the same harm.

16 So, for example, in a situation where  
17 a manufacturer inappropriately promotes a  
18 medication and where a distributor  
19 inappropriately does not flag a suspicious  
20 shipment, then that is an indivisible harm, at  
21 least as I'm using the word, because there are  
22 multiple parties, that each were at fault.

23 Q. And how did you determine that the  
24 harms that you analyzed in your report were

<p style="text-align: right;">Page 70</p> <p>1 indivisible?</p> <p>2 MR. SOBOL: Objection.</p> <p>3 You may answer.</p> <p>4 A. I did not make a -- I did not make a</p> <p>5 determination in this report as to which</p> <p>6 specific harms resulted from, for example,</p> <p>7 manufacturers and which specific harms resulted</p> <p>8 from distributors, so I did not do a division of</p> <p>9 the harms that way.</p> <p>10 BY MR. KNAPP:</p> <p>11 Q. My question was, how did you determine</p> <p>12 that these particular harms were indivisible?</p> <p>13 MR. SOBOL: Objection.</p> <p>14 A. This is a statement not that I</p> <p>15 determined that, but rather it was a reason why</p> <p>16 I was bolstering the argument in the first</p> <p>17 sentence, which is in part why I did not try to</p> <p>18 uniquely apportion harm. And I was giving an</p> <p>19 example of why one might not want to try to</p> <p>20 uniquely apportion harm as a specific example of</p> <p>21 which might be harms that are indivisible.</p> <p>22 BY MR. KNAPP:</p> <p>23 Q. So do you -- strike that.</p> <p>24 Do you have an opinion whether these</p>	<p style="text-align: right;">Page 72</p> <p>1 each party because the harm would not have</p> <p>2 occurred unless -- it had to be the case that</p> <p>3 both parties failed their responsibilities in</p> <p>4 order for the harm to occur.</p> <p>5 Q. And so here did you conclude that it's</p> <p>6 impossible to uniquely attribute harm to each</p> <p>7 contributing party?</p> <p>8 MR. SOBOL: Objection.</p> <p>9 A. No, I did not conclude that it was</p> <p>10 impossible to do so. I merely noted why I was</p> <p>11 not doing so here.</p> <p>12 BY MR. KNAPP:</p> <p>13 Q. So -- strike that.</p> <p>14 Do you agree that there are parties</p> <p>15 that are not defendants here that contributed to</p> <p>16 the harms that you analyzed in your report?</p> <p>17 MR. SOBOL: Objection.</p> <p>18 A. That sentence is too vague for me to</p> <p>19 give a yes or no answer to.</p> <p>20 BY MR. KNAPP:</p> <p>21 Q. Do you believe that there are</p> <p>22 individuals or entities that contributed to the</p> <p>23 harms that you analyzed that are not defendants</p> <p>24 in this lawsuit?</p>
<p style="text-align: right;">Page 71</p> <p>1 harms are indivisible, or are they divisible?</p> <p>2 A. I do not have an opinion about that.</p> <p>3 Q. All right. If we go to the next</p> <p>4 clause of that sentence, it says "It is unlikely</p> <p>5 that a unique attribution of harm to each</p> <p>6 contributing" possible -- "each contributing" --</p> <p>7 excuse me -- "party is possible."</p> <p>8 Do you see that?</p> <p>9 A. Yes, I do see that.</p> <p>10 Q. Why is it unlikely?</p> <p>11 A. I'm going to tell you what I meant,</p> <p>12 which was economics language, and that may not</p> <p>13 be -- I'm not sure I'm going to get the legal</p> <p>14 words correctly, so just to give you that.</p> <p>15 As an economic matter, if there is a</p> <p>16 harm which both parties are responsible for the</p> <p>17 full extent of the harm, for example, one party,</p> <p>18 the manufacturer, is engaged in misconduct in</p> <p>19 promoting the medication inappropriately and</p> <p>20 another party, the distributor, engaged in</p> <p>21 misconduct by not noting the suspicious</p> <p>22 shipments, then in essence both are responsible</p> <p>23 for the harm, and as an economic matter one</p> <p>24 could not assign a percentage of the blame to</p>	<p style="text-align: right;">Page 73</p> <p>1 MR. SOBOL: Objection.</p> <p>2 A. I don't make a determination here as</p> <p>3 to who gets what portion of the blame, so that's</p> <p>4 not -- that's not an area that I have an opinion</p> <p>5 upon.</p> <p>6 BY MR. KNAPP:</p> <p>7 Q. Your model cannot rule out that there</p> <p>8 are individuals or entities that contributed to</p> <p>9 the harms that you analyzed that are not</p> <p>10 defendants in this case?</p> <p>11 MR. SOBOL: Objection.</p> <p>12 A. I haven't made any -- the model does</p> <p>13 not rely upon any specific delineation as to who</p> <p>14 it was that caused the harm.</p> <p>15 BY MR. KNAPP:</p> <p>16 Q. Now, Professor Cutler, that wasn't my</p> <p>17 question.</p> <p>18 My question was, your model does not</p> <p>19 rule out that there are individuals or entities</p> <p>20 that contributed to the harms that you analyzed</p> <p>21 who are not parties to this lawsuit?</p> <p>22 MR. SOBOL: Objection. Asked and</p> <p>23 answered twice.</p> <p>24 A. Again, I haven't made any</p>



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1 determination as to who are the parties at fault  
 2 here.  
 3 BY MR. KNAPP:  
 4 Q. All right. Let's turn to Paragraph 3  
 5 of Appendix J, which is towards the back. All  
 6 right. I'm looking on the second page of  
 7 paragraph -- sorry, Paragraph 3 which goes on to  
 8 the second page, Page 2.

9 Do you see the first full sentence?  
 10 It says "As an economic matter, manufacturers  
 11 are appropriately held liable for at least the  
 12 10 percent of the harm that distributors could  
 13 not have avoided."

14 That refers back to the prior  
 15 sentence, right?

16 A. That is correct, yes.

17 Q. What does it mean to be held liable as  
 18 an economic matter?

19 MR. SOBOL: Objection.

20 A. As an economic matter, held liable  
 21 would be that the blame would be attributable to  
 22 them economically.

23 BY MR. KNAPP:

24 Q. And you say that if the share of the

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1 harm attributed to manufacturers is greater than  
 2 the share of harms that could have been avoided  
 3 by distributors, that the manufacturers are  
 4 liable for at least the difference, right?

5 A. Yes, that is correct.

6 Q. And do you have an opinion on whether  
 7 the manufacturers are liable for just that  
 8 difference, or if they're liable for something  
 9 more than that as an economic matter?

10 A. As an economic matter, no, as we were  
 11 talking about, the harm which is caused by  
 12 failure on the part of both parties, as an  
 13 economic matter there's no easy way to attribute  
 14 it between the different defendants.

15 Q. And again, when you say there's no  
 16 easy way, what you mean is you haven't done it?

17 MR. SOBOL: Objection.

18 A. What I mean is that one would have to  
 19 make some type of assumptions to do it. I have  
 20 not made any assumptions that would do that.

21 BY MR. KNAPP:

22 Q. All right. So if you look at Table  
 23 J.1, do you see Table J.1 says the  
 24 percentages -- sorry, "percent of shipments

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1 attributable to distributors' misconduct."

2 Do you see that?

3 A. Yes, I do see that.

4 Q. Do you know whether the percentage of  
 5 shipments that you attribute to distributor  
 6 misconduct in each year is higher, lower, or the  
 7 same as the percentage of shipments that you  
 8 attribute to marketing misconduct?

9 MR. SOBOL: Objection to the form, but  
 10 he can answer.

11 A. I have not -- I have not attributed  
 12 anything specifically to marketers, marketers'  
 13 misconduct.

14 BY MR. KNAPP:

15 Q. When I say for -- purposes of this  
 16 question, when I say marketing misconduct, I  
 17 mean the part of your analysis that relies on  
 18 the percentages from Professor Rosenthal's  
 19 report. Do you understand that?

20 A. Okay. That -- so just to be clear,  
 21 that's not what I -- the word marketing is what  
 22 threw me off there since Professor Rosenthal  
 23 gave me an estimate which is not specific just  
 24 to marketers.

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1 Q. What is your understanding of what the  
 2 percentages are that you got from Professor  
 3 Rosenthal?

4 A. Professor Rosenthal gave me an  
 5 estimate of the share of shipments which are due  
 6 to misconduct on the part of the defendants as a  
 7 whole.

8 Q. And so you don't understand Professor  
 9 Rosenthal's percentages to be attributed to any  
 10 particular defendant group, is that your  
 11 understanding?

12 A. That is my understanding of Professor  
 13 Rosenthal's percentages.

14 Q. And what is your understanding of the  
 15 alleged misconduct that Professor Rosenthal was  
 16 looking at?

17 MR. SOBOL: Objection. Asked and  
 18 answered.

19 A. Professor Rosenthal was looking at the  
 20 misconduct on the part of the manufacturers in  
 21 terms of promoting the drugs in an inappropriate  
 22 way, and of the distributors in terms of failing  
 23 to identify, report, and stop suspicious  
 24 shipments.

<p style="text-align: right;">Page 529</p> <p>1 large part of the variation in mortality changes  2 across areas. So in that sense we're  3 controlling for differences in Cuyahoga and  4 Summit relative to the rest of the nation.  5 But the specific shipments variable,  6 there's -- we have no way to see whether that  7 number would be different in one or two  8 particular counties relative to the rest of the  9 counties. There's no econometric way one could  10 estimate whether that coefficient is different  11 for just those two counties. You'd need a  12 different type of model entirely in order to  13 estimate a coefficient for a single county. You  14 can't do it with just one observation for a  15 county, or even a group of two counties. You  16 couldn't do it.  17 Q. All right. Let's look at Table 3.10  18 on 64. And I just want to make sure my  19 understanding of these columns is correct, so  20 hopefully these will be relatively simple  21 questions.  22 Column A reports actual mortality for  23 all the counties in your sample, right?  24 A. That is correct, column A is the</p>	<p style="text-align: right;">Page 531</p> <p>1 possible given just one observation per county  2 to have a different -- it's econometrically  3 impossible to have a different coefficient for  4 each county.  5 BY MR. KNAPP:  6 Q. Did you test whether the impacts that  7 you estimated based upon all the counties in  8 your sample lead to unexpected results in any  9 particular county?  10 MR. KO: Object to the form.  11 A. A general thing that one does in  12 looking at regression analysis is often to look  13 at the specific observations and then to see how  14 well the regression fits the observations.  15 To the extent that there are outliers  16 in that, that is, a particular county is way off  17 the regression line, one then often either  18 adjusts the model or sometimes decides to  19 eliminate an observation entirely because it may  20 not be relevant.  21 In this case, as we spoke about  22 earlier, there were four counties that they're  23 not so far off the line but the shipments were  24 so high that it seemed clear that they -- and</p>
<p style="text-align: right;">Page 530</p> <p>1 actual mortality rate.  2 Q. And column B reports the actual  3 shipments for all counties -- excuse me, strike  4 that.  5 Column B reports actual shipments for  6 all counties in your sample, right, the  7 cumulative average?  8 A. That is correct, column B is the  9 cumulative average shipment for the counties in  10 the sample.  11 Q. And then we talked about this, but  12 column D is the shipment coefficient for all of  13 the counties in your sample, right?  14 A. That's correct. That is the -- that's  15 not quite phrased the exact way I would phrase  16 it. That is the shipment coefficient from the  17 regression model that uses cross-county data, so  18 it is the shipment coefficient from the model.  19 Q. But it's not as if there's a different  20 shipment coefficient for different counties  21 included in your sample?  22 A. No.  23 MR. KO: Object to the form.  24 A. No. As I said, it would not be</p>	<p style="text-align: right;">Page 532</p> <p>1 they were from areas where cross-county  2 transshipment was reported by press and others  3 to be big, that they seemed so high that I felt  4 more comfortable using the vast bulk of the  5 other data, the 400 out of 404 other data that  6 did not have any concerns about those issues in  7 those four counties.  8 BY MR. KNAPP:  9 Q. So let me just pick up on something  10 that you said. You said you looked at press  11 articles about high rates of transshipments.  12 What press articles did you look at that  13 referenced high rates of transshipments into or  14 out of Franklin County, Ohio?  15 A. I don't think there were any that  16 specifically mentioned Franklin County, Ohio.  17 There are articles and books that have spoken  18 about transshipments from, for example, Florida,  19 from West Virginia, from Kentucky, from Ohio.  20 And so because the counties with the  21 very high shipments tended to be in states in  22 general where transshipments were reported to be  23 an issue, I thought it -- I thought it more -- a  24 more convincing analysis to eliminate those four</p>



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1 observations as being very different on  
 2 the shipment variable.  
 3 Q. Did you consider whether it's possible  
 4 that your regression model would attribute  
 5 greater than 100 percent impact on mortality  
 6 when applied to any single county?  
 7 MR. KO: Object to the form.  
 8 Which regression model?  
 9 A. It's -- so, in general, one does look  
 10 for things like that. But the issue is there  
 11 are always, of course, points that are off the  
 12 line, so there are always outlier observations.  
 13 There may be observations for which  
 14 there was a particularly high level of shipments  
 15 relative to population not in those four, or for  
 16 which other factors imply an increase in  
 17 mortality where the prediction as a whole could  
 18 very well lead to an estimate of over  
 19 100 percent or any other type of issue.  
 20 That's why as an econometrician you  
 21 wouldn't use the analysis of this to predict for  
 22 a single county, but rather one wants to use  
 23 this to develop an estimate for the set of  
 24 counties as a whole because that's what this --

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1 this is what is describing the vast -- the  
 2 average county in the data set, and that's what  
 3 that regression coefficient is giving, and,  
 4 therefore, it's appropriate to evaluate it at  
 5 the average in the data set.  
 6 BY MR. KNAPP:  
 7 Q. You would agree that shipments of  
 8 prescription opioids can't have more than  
 9 100 percent impact on mortality, right?  
 10 A. Of course, the question is 100 percent  
 11 relative to what? It is possible that there  
 12 could be fewer deaths than would be predicted by  
 13 a model. For example, if a county were  
 14 particularly good at treat -- if a county got to  
 15 be particularly good at treating people who had  
 16 opioid overdoses, then the actual mortality rate  
 17 would be lower than would be predicted on the  
 18 basis of shipments because the county was  
 19 successfully able to prevent death that results  
 20 from opioid use.  
 21 Q. So it's your testimony that if there's  
 22 a greater than 100 percent impact on mortality  
 23 for any given county that that can be explained  
 24 by shipments into that county?

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1 A. I'm not saying that that's -- I'm not  
 2 saying that that is the explanation. I'm making  
 3 two points. The first point is that it is, of  
 4 course, theoretically possible that a county  
 5 could be estimated to have more deaths than it  
 6 actually does because the county does a good job  
 7 at preventing deaths, so preventing actual  
 8 deaths relative to -- relative to what would be  
 9 predicted. So that county is not -- in that  
 10 eventually, in that hypothetical, that county  
 11 would have predicted deaths greater than actual  
 12 deaths, and that would be a perfectly correct  
 13 statement -- conclusion to draw.  
 14 And, second, I'm making -- so that's  
 15 the first point to make. And then the second  
 16 point to make is that using a regression  
 17 coefficient to then predict and look at a single  
 18 county is generally not what an applied  
 19 economist does, because a single county may have  
 20 an outlier for a particular reason in a  
 21 particular year. And the regression says yes,  
 22 given all the outliers, here is the nature of  
 23 the data, here is what I -- here's what's true  
 24 about the data as a whole, but that doesn't --

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1 but it doesn't erase what may be an outlier for  
 2 any number of reasons in a county.  
 3 And so it's just not -- this is not  
 4 the methodology you'd use if you wanted to  
 5 understand that single county. You would sort  
 6 of almost do an exact time series of that  
 7 specific county, and you'd use a very different  
 8 methodology.  
 9 So just as a -- so the second point is  
 10 as a general matter, I wouldn't apply this to a  
 11 single county and say, oh, okay, that's the  
 12 obvious way to do it. Instead I would do what  
 13 we did here and what most econometricians would  
 14 do, which is to apply it to the sample as a  
 15 whole.  
 16 Q. Okay. Let's look at Paragraph 109.  
 17 So now Paragraph 109, we're looking at your  
 18 application of the direct model to the period --  
 19 to elicit mortality in the period 2011 to 2016,  
 20 right?  
 21 A. Yes, that is correct.  
 22 Q. Why did you conclude that it was  
 23 reasonable to assume that the relationship  
 24 between opioid shipments and deaths prior to

<p style="text-align: right;">Page 601</p> <p>1 qualified to opine on whether the defendants --                  2 whether any of the defendants here violated the                  3 CSA, right?                  4 A. I am not making a determination as to                  5 whether the defendants violated the CSA.                  6 Q. And we talked about unique attribution                  7 of harms in connection with the report as a                  8 whole, but I want to ask you specifically to the                  9 model in Appendix J.                  10 You do not attempt to uniquely                  11 attribute harm between any different type of                  12 defendant in Appendix J, correct?                  13 MR. KO: Object to the form.                  14 A. Can you just explain by you mean --                  15 what you mean by "you do not attempt to                  16 distribute to any particular type of defendant,"                  17 what you mean by "type of defendant" in that                  18 sentence?                  19 BY MR. KNAPP:                  20 Q. You said distribute, and I may have                  21 said distribute. I meant uniquely attribute,                  22 with an A, not a D.                  23 But when I say type of defendant, I                  24 mean manufacturer, distributor, pharmacy, so let</p>	<p style="text-align: right;">Page 603</p> <p>1 showing how to take an estimate of                  2 distributors' -- in this case an estimate that                  3 was provided to me of distributors' misconduct                  4 and calculate the harms that result from that.                  5 And nothing in Appendix J is specific to any                  6 single defendant.                  7 MR. KNAPP: Why don't we take just a                  8 five-minute break, and I'll be turning over the                  9 mic here.                  10 THE VIDEOGRAPHER: The time is                  11 2:19 p.m., and we're off the record.                  12 (Whereupon, a recess was taken.)                  13 THE VIDEOGRAPHER: The time is                  14 2:36 p.m., and we're on the record.                  15 EXAMINATION                  16 BY MR. HALLER:                  17 Q. Good afternoon, Professor Cutler. I'm                  18 David Haller. We've just had a chance to meet                  19 very briefly just before we went on the record.                  20 You will not be as impressed by my econometric                  21 knowledge as you were by Mr. Knapp's, so I hope                  22 you'll be a little patient with me.                  23 A. I will do my best.                  24 Q. Now, near the end of your analysis,</p>
<p style="text-align: right;">Page 602</p> <p>1 me ask you that.                  2 In this model you do not attempt to                  3 uniquely attribute harm between the different                  4 types of defendants in this lawsuit, right?                  5 MR. KO: Object to the form.                  6 A. In the model that I develop as a                  7 whole, there is nothing that says how the harm                  8 gets attributed to any particular defendant.                  9 The model can then take as an input                  10 the percentage of shipments associated with                  11 misconduct of all the parties as a whole, some                  12 of the parties, some particular group of                  13 parties, and then use that to come up with an                  14 output. But I myself do not come up with that                  15 attribution.                  16 BY MR. KNAPP:                  17 Q. And in this model, Appendix J, you're                  18 not attempting to and you do not uniquely                  19 attribute harm, any of the harms that you                  20 analyzed, to any particular defendant, correct?                  21 MR. KO: Object to the form. Asked                  22 and answered.                  23 A. That's correct. Appendix J is not                  24 looking at any single defendant. It's merely</p>	<p style="text-align: right;">Page 604</p> <p>1 one of the things you arrive at is a percent                  2 impact, right, a percent of harms attributable                  3 to defendants' misconduct, and your endpoint                  4 there is a percent impact, correct?                  5 A. That is correct. I estimate an                  6 endpoint which is the percentage of harms which                  7 are attributable to defendants' misconduct.                  8 Q. And then your final step is to apply                  9 that percentage to certain assumed dollars spent                  10 by the counties in various areas, correct?                  11 A. I do not apply it specifically to the                  12 dollars spent by the counties. The application                  13 to the dollars spent by the counties is in                  14 Professor McGuire's report.                  15 Q. What do you -- what do you apply the                  16 percent impact to?                  17 A. What I estimate in my report is the                  18 percentage of the activities of these agencies                  19 that resulted from misconduct on the part of                  20 defendants.                  21 Q. So if I, for example, refer you to                  22 Table 3.13 on Page 70 of your report, you can                  23 see there on the right-hand column the percent                  24 impact percentages that you calculated and</p>